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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,799	06/08/2000	Baljeet Singh Baweja	AUS0000172.US1	9729

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International Business Machines Corporation
Intellectual Property Law Department
Internal Zip 4054
11400 Burnet Road
Austin, TX 78758

EXAMINER

PATEL, HARESH N

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 05/04/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/589,799

Applicant(s)

BAWEJA ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination.
2. Applicant's appeal brief, paper number 7, was received on March 22, 2004. Based on applicant's persuasive assertions, the finality of the prior office action is withdrawn. Hence, this office action is made non-final.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6, 7, 12, 17-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobe et al. 5,778,224 (Hereinafter Tobe) in view of Kitagawa et. al. 6,578,159 (Hereafter Kitagawa).
6. As per claims 1, 7, 12, Tobe teaches a system, a method and a computer readable medium to perform the following:

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a workload balancing system for distributing data processing transactions (e.g. executing a plurality of transactions and a distributed processing system, abstract) into a plurality of messages (e.g., distributed messages among the computers, abstract) and for dynamically allocating each of said messages to different computer systems for performance (e.g., distribution of transactions to all the computers and the execution of transactions based on distribution arrangement, abstract) comprising,

means for requesting the performance of a data processing transaction (e.g., management node receiving accumulation completion notifications from all nodes and establishing synchronization with all the nodes, figure 5),

a server computer for said distributing and allocating said transaction to different computer systems (e.g., distribution node distributing transactions to the computers for handling the transactions, abstract).

user interactive display means for displaying transactions and associated computer systems (e.g., screens displaying information related to each job assigned to the associated processing node, figures 2, 3, 4, 7 and 8).

However, Tobe does not specifically mention about splitting a transaction into a plurality of messages.

It is well known in the prior art, for example, Kitagawa teaches splitting a transaction into a plurality of messages (e.g., splitting a transaction into more than one transactions, figure 5A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tobe with the teachings of Kitagawa in order to facilitate creation of multiple messages for a single transaction. Multiple messages created from a single

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transaction can be individually processed in parallel by the assigned computer system. The parallel execution of the parts of the transaction by different computer systems will help quick processing a transaction rather than a transaction processed by a single computer system, as suggested by Kitagawa.

7. As per claims 6 and 17, Tobe teaches the following:

an interactive display computer including said means for requesting the performance of a data processing transaction and user interactive display means for displaying said allocated messages and associated computer systems (e.g., screen display requesting information to be displayed for a user and displaying job assigned to each associated node for processing, figures 2, 3, 4, 7 and 8).

8. As per claims 18-20, refer to claims 1, 7 and 12 for rejection and combination of references.

9. Claims 2-4, 8-10, 13-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobe and Kitagawa in view of Gossler et. al. 6,578,159 (Hereafter Gossler).

10. As per claims 2, 3, 8, 9, 13, 14, Tobe and Kitagawa do not specifically mention about the claimed limitations.

However, it is well known in the prior art, for example, Gossler teaches the following:

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a server queue for strong the plurality of messages from the distributed transaction, each of said different computer systems has an associated queue for storing messages allocated to each respective computer system (e.g. each service unit comprises a queue for receiving and queuing the incoming service request, abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tobe and Kitagawa with the teachings of Gossler in order to facilitate storing the messages of the transaction in for processing. The messages received in the queue are processed by the computer system in the order it is received, as suggested by Gossler.

11. As per claims 4, 10 and 15, Tobe and Kitagawa do not specifically mention about the claimed limitations.

However, it is well known in the prior art, for example, Gossler teaches the following:
at least one of said different computer systems has means for reallocating to other computer systems, messages initially allocated to said one computer system (e.g., assigned computer system requesting another computer system to process the assigned transaction messages to process during workload conditions, col., 2, line 50 - col., 3, line 49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tobe and Kitagawa with the teachings of Gossler in order to facilitate reallocating of the transaction message to another computer system for processing. When the assigned computer system has several messages to be processed, it will pass the

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received transaction to the other computer system, hence the transaction messages processing will be handled quicker, as suggested by Gossler.

12. Claims 5, 11, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobe, Kitagawa and Gossler in view of "Official Notice".

13. As per claims 5, 11, 16, Tobe, Kitagawa and Gossler do not specifically mention about displaying said reallocated messages. "Official Notice" is taken that both the concept and advantages of providing display of reallocated messages is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include display of reallocated messages with the teachings of Tobe, Kitagawa and Gossler in order to facilitate a user to view the reallocated messages assigned to the computer system. After reallocation, the user interface will display the updated computer system, which is assigned to process the reallocated transaction message.

Conclusion

14. Examiner has found numerous arts related to the disclosed subject matter. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Examiner acknowledges the applicant's invention as per the specification. However, the scope of the claimed limitations is too broad. For example, claim 1, recite the terms "a workload balancing system for distributing data processing transactions", and, "distributing said transaction into a plurality of messages". It is not clear how a workload balancing is achieved. It

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is also not clear which steps of the claim perform a workload balancing. Claim 1, recites the term "requesting the performance of a data processing transaction". It is not clear what is considered as a performance of a data processing transaction and how the performance is achieved. Claim 1, recites the term "user interactive display means for displaying means for displaying said allocated messages and associated computer systems". It is not clear why the allocated messages and associated computer systems are displayed. Claim 1, recites the term "means for requesting the performance of a data processing transaction". The relationship between the means for requesting and where the messages are sent to is unclear. Claim 1, it is not clear how all the steps of the claim are related to each other. Claims 7, 12, 18-20 are also as broad as claim 1. Claims 2-6, 8-11, 13-17, it is not clear why and how the claimed limitations are performed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

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April 19, 2004

A handwritten signature in black ink, appearing to read 'JF', is positioned above the official stamp.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100